

## Safety Data Sheet



### Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

#### 1.1 Product identifier

- Product Name** • **DEF Urea Solution, 40%**  
**Synonyms** • 40% Urea; Aqueous Solution Organic Salt Solution; DEF Urea Solution

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

- Relevant identified use(s)** • Diesel Exhaust Fluid

#### 1.3 Details of the supplier of the safety data sheet

- Manufacturer** • Imperial Premix LLC  
P.O. Box 278  
Imperial, CA 92251  
United States  
www.premixit.com  
defproducts@gmail.com  
**Telephone (General)** • 760-427-4479 - Manager

#### 1.4 Emergency telephone number

- Manufacturer** • 1-800-424-9300 - CHEMTREC (For Health Emergencies, Contact Your Local Poison Center)

### Section 2: Hazards Identification

#### EU/EEC

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 2015/830]

#### 2.1 Classification of the substance or mixture

- CLP** • Not classified

#### 2.2 Label Elements

- CLP**  
**Hazard statements** • No label element(s) required

#### 2.3 Other Hazards

- CLP** • According to Regulation (EC) No. 1272/2008 (CLP) this material is not considered hazardous.

## UN GHS Revision 3

According to: UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS): Third Revised Edition

### 2.1 Classification of the substance or mixture

- UN GHS
- Eye Mild Irritation 2B

### 2.2 Label elements

UN GHS

#### WARNING

**Hazard statements** • Causes eye irritation

#### Precautionary statements

**Prevention** • Wash thoroughly after handling.

**Response** • IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.

### 2.3 Other hazards

- UN GHS
- No data available
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## United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

### 2.1 Classification of the substance or mixture

- OSHA HCS 2012
- Eye Mild Irritation 2B

### 2.2 Label elements

OSHA HCS 2012

#### WARNING

**Hazard statements** • Causes eye irritation

#### Precautionary statements

**Prevention** • Wash thoroughly after handling.

**Response** • IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.

### 2.3 Other hazards

- OSHA HCS 2012
- No data available
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## Section 3 - Composition/Information on Ingredients

### 3.1 Substances

- Material does not meet the criteria of a substance.

### 3.2 Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Urea	CAS:57-13-6 EC Number:200-315-5	40% TO 41%	Ingestion/Oral-Rat LD50 • 8471 mg/kg	EU CLP: Not Classified UN GHS Revision 3: Eye Irrit. 2B OSHA HCS 2012: Eye Irrit. 2B	NDA
Methylenediurea	CAS:13547-17-6 EINECS:236-918-5	0.4% TO 1%	NDA	EU CLP: Not Classified UN GHS Revision 3: Not Classified OSHA HCS 2012: Not Classified	NDA

## Section 4 - First Aid Measures

### 4.1 Description of first aid measures

- Inhalation**
- Under normal conditions of use, no health effects are expected. If signs/symptoms develop, move person to fresh air. Give artificial respiration if victim is not breathing. If irritation develops and persists, get medical attention.
- Skin**
- In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Wash skin with soap and water.
- Eye**
- In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If easy to do, remove contact lenses, if worn.
- Ingestion**
- Do NOT induce vomiting. Rinse mouth. Do not give anything by mouth to an unconscious person.

### 4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

### 4.3 Indication of any immediate medical attention and special treatment needed

- Notes to Physician**
- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

## Section 5 - Firefighting Measures

### 5.1 Extinguishing media

- Suitable Extinguishing Media**
- This product is not flammable. In case of fire use media as appropriate for surrounding fire.

- Unsuitable Extinguishing Media**
- No data available.

### 5.2 Special hazards arising from the substance or mixture

- Unusual Fire and Explosion Hazards**
- Closed containers exposed to extreme heat can rupture due to pressure buildup.
- Hazardous Combustion Products**
- If involved in a fire, oxides of carbon and nitrogen may be generated; exposure to heat may generate ammonia fumes.

### 5.3 Advice for firefighters

- Structural firefighters' protective clothing will only provide limited protection. Wear positive pressure self-contained breathing apparatus (SCBA).

## Section 6 - Accidental Release Measures

### 6.1 Personal precautions, protective equipment and emergency procedures

- Personal Precautions**
- Wear suitable protective clothing, gloves, and eye/face protection.

- Emergency Procedures**
- Stop leak if you can do it without risk. Keep unauthorized personnel away. Use normal clean up procedures.

## 6.2 Environmental precautions

- None expected to be necessary if material is used under ordinary conditions and as recommended.

## 6.3 Methods and material for containment and cleaning up

- Containment/Clean-up Measures**
- Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in suitable container.

## 6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

## Section 7 - Handling and Storage

### 7.1 Precautions for safe handling

- Handling**
- Keep out of reach of children. May be corrosive to metals. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Use good safety and industrial hygiene practices. Do not take internally.

### 7.2 Conditions for safe storage, including any incompatibilities

- Storage**
- Store in a well-ventilated place. Keep container tightly closed. Ventilate enclosed areas. Do not store at temperatures below 40°F.

- Special Packaging Materials**
- Store only in approved containers.

- Incompatible Materials or Ignition Sources**
- Keep away from heat and strong oxidizers.

### 7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

## Section 8 - Exposure Controls/Personal Protection

### 8.1 Control parameters

### 8.2 Exposure controls

- Engineering Measures/Controls**
- No applicable exposure limits available for product or components.

**Personal Protective Equipment**

- Respiratory**
- In case of insufficient ventilation, wear suitable respiratory equipment.

- Eye/Face**
- Wear protective eyewear (goggles, face shield, or safety glasses).

- Skin/Body**
- Wear appropriate gloves.

- General Industrial Hygiene Considerations**
- Do not get in eyes or on skin or clothing. Handle in accordance with good industrial hygiene and safety practice.

- Environmental Exposure Controls**
- Follow best practice for site management and disposal of waste.

## Section 9 - Physical and Chemical Properties

### 9.1 Information on Basic Physical and Chemical Properties

#### Material Description

Physical Form	Liquid	Appearance/Description	Colorless liquid with no odor to a slight ammonia odor.
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Color	Colorless	Odor	None to slight ammonia.
Odor Threshold	Data lacking		

**General Properties**

Boiling Point	> 212 °F(> 100 °C)	Melting Point/Freezing Point	Data lacking
Decomposition Temperature	Data lacking	pH	9 to 9.5
Specific Gravity/Relative Density	= 1.11 Water=1	Bulk Density	< 9.28 lbs/gal
Water Solubility	Soluble 100 %	Viscosity	Data lacking
Explosive Properties	Data lacking	Oxidizing Properties:	Data lacking

**Volatility**

Vapor Pressure	Data lacking	Vapor Density	Data lacking
Evaporation Rate	> 1 n-Butyl Acetate = 1		

**Flammability**

Flash Point	Data lacking	UEL	Data lacking
LEL	Data lacking	Autoignition	Data lacking
Flammability (solid, gas)	Data lacking		

**Environmental**

Octanol/Water Partition coefficient	Data lacking		
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**9.2 Other Information**

- No additional physical and chemical parameters noted.

**Section 10: Stability and Reactivity****10.1 Reactivity**

- No dangerous reaction known under conditions of normal use.

**10.2 Chemical stability**

- Stable

**10.3 Possibility of hazardous reactions**

- Hazardous polymerization will not occur.

**10.4 Conditions to avoid**

- None known.

**10.5 Incompatible materials**

- Avoid contact with strong oxidizing agents such as chlorine (bleach), peroxides, chromates, nitric acid, perchlorates, concentrated oxygen or permanganates. Contact can generate heat, fires, explosions and release toxic fumes.

**10.6 Hazardous decomposition products**

- If involved in a fire, oxides of carbon and nitrogen may be generated; exposure to heat may generate ammonia fumes.

**Section 11 - Toxicological Information****11.1 Information on toxicological effects**

Components		
Urea (40% TO 41%)	57-13-6	<b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 8471 mg/kg; <b>Irritation:</b> Skin-Human • 22 mg 3 Day(s)-Intermittent • Mild irritation; <b>Mutagen:</b> Cytogenetic analysis • Ingestion/Oral-Mouse • 100 g/kg 5 Day(s)-Continuous; <b>Tumorigen / Carcinogen:</b> Ingestion/Oral-Rat TDLo • 821 g/kg 1 Year(s)-Continuous; <i>Tumorigenic:Neoplastic by RTECS criteria; Blood:Tumors; Blood:Lymphoma, including Hodgkin's disease</i>

GHS Properties	Classification
Acute toxicity	EU/CLP • Classification criteria not met UN GHS 3 • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Skin corrosion/Irritation	EU/CLP • Classification criteria not met UN GHS 3 • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Serious eye damage/Irritation	EU/CLP • Classification criteria not met UN GHS 3 • Eye Mild Irritation 2B OSHA HCS 2012 • Eye Mild Irritation 2B
Skin sensitization	EU/CLP • Classification criteria not met UN GHS 3 • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Respiratory sensitization	EU/CLP • Classification criteria not met UN GHS 3 • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Aspiration Hazard	EU/CLP • Classification criteria not met UN GHS 3 • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Carcinogenicity	EU/CLP • Classification criteria not met UN GHS 3 • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Germ Cell Mutagenicity	EU/CLP • Classification criteria not met UN GHS 3 • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Toxicity for Reproduction	EU/CLP • Classification criteria not met UN GHS 3 • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
STOT-SE	EU/CLP • Classification criteria not met UN GHS 3 • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
STOT-RE	EU/CLP • Classification criteria not met UN GHS 3 • Classification criteria not met OSHA HCS 2012 • Classification criteria not met

## Potential Health Effects

### Inhalation

- Acute (Immediate)** • Under normal conditions of use, no health effects are expected.
- Chronic (Delayed)** • None known.

### Skin

- Acute (Immediate)** • Under normal conditions of use, no health effects are expected.
- Chronic (Delayed)** • None known.

### Eye

- Acute (Immediate)** • May cause mild irritation.
- Chronic (Delayed)** • None known.

## Ingestion

**Acute (Immediate)**

- Under normal conditions of use, no health effects are expected.

**Chronic (Delayed)**

- None known.

**Key to abbreviations**

LD = Lethal Dose

TD = Toxic Dose

## Section 12 - Ecological Information

### 12.1 Toxicity

- Material data lacking.

### 12.2 Persistence and degradability

- Material data lacking.

### 12.3 Bioaccumulative potential

- Material data lacking.

### 12.4 Mobility in Soil

- Material data lacking.

### 12.5 Results of PBT and vPvB assessment

- No PBT and vPvB assessment has been conducted.

### 12.6 Other adverse effects

- No studies have been found.

## Section 13 - Disposal Considerations

### 13.1 Waste treatment methods

**Product waste**

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

**Packaging waste**

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

## Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA
TDG	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA
IMO/IMDG	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA
IATA/ICAO	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA

**14.6 Special precautions for user**

- None specified.

**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

- Data lacking.

## Section 15 - Regulatory Information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications • Acute

State Right To Know				
Component	CAS	MA	NJ	PA
Methylenediurea	13547-17-6	No	No	No
Urea	57-13-6	No	No	No

Inventory						
Component	CAS	China	EU EINECS	EU ELNICS	Japan ENCS	Korea KECL
Methylenediurea	13547-17-6	Yes	Yes	No	No	No
Urea	57-13-6	Yes	Yes	No	Yes	Yes

Inventory (Con't.)		
Component	CAS	TSCA
Methylenediurea	13547-17-6	No
Urea	57-13-6	Yes

## Australia

### Labor

#### Australia - Work Health and Safety Regulations - Hazardous Chemicals Requiring Health Monitoring

• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed

#### Australia - High Volume Industrial Chemicals List

• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	

#### Australia - List of Designated Hazardous Substances - Classification

• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed

### Environment

#### Australia - National Pollutant Inventory (NPI) Substance List

• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed

#### Australia - Ozone Protection Act - Scheduled Substances

• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed

#### Australia - Priority Existing Chemical Program

• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed

## Europe

### Other

#### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification

• Methylenediurea	13547-17-6	Not Listed
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• Urea	57-13-6	Not Listed
<b>EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits</b>		
• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed
<b>EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling</b>		
• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed
<b>EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations</b>		
• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed
<b>EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases</b>		
• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed

## United States

### Labor

#### U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed

#### U.S. - OSHA - Specifically Regulated Chemicals

• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed

### Environment

#### U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed

#### U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed

#### U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed

#### U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed

#### U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed

#### U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed

#### U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed

**United States - California****Environment****U.S. - California - Proposition 65 - Carcinogens List**

• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed

**U.S. - California - Proposition 65 - Developmental Toxicity**

• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed

**U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)**

• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed

**U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)**

• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed

**U.S. - California - Proposition 65 - Reproductive Toxicity - Female**

• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed

**U.S. - California - Proposition 65 - Reproductive Toxicity - Male**

• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed

**United States - Pennsylvania****Labor****U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List**

• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed

**U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances**

• Methylenediurea	13547-17-6	Not Listed
• Urea	57-13-6	Not Listed

**15.2 Chemical Safety Assessment**

- No Chemical Safety Assessment has been carried out.

**Section 16 - Other Information****Revision Date**

- 24/January/2017

**Last Revision Date**

- 23/January/2017

**Preparation Date**

- 19/January/2017

**Disclaimer/Statement of Liability**

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